Atty. Docket: 2003B103/2

Amendment dated August 26, 2008

Reply to OA mailed July 9, 2008

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**REMARKS** 

The Examiner maintains the rejection of claims 36-39, 41-46, 48-61, 63, 64, 72-74, 76-

78, 80, 81 and 83-85. The Applicants add new claims 87-89, based on originally filed dependent

claims now cancelled. No new matter is added.

Claims 36, 51, 73 and 80 are each amended by removing features added in the last

response.

Further, claims 51 and 72 are amended by deleting a "o" symbol as done in claim 36.

Claim 48 was rejected under 35 U.S.C. § 112. This claim is cancelled without prejudice.

The Examiner has maintained the rejection of independent claims 36, 51, 72, 73 and 80

(and the dependent claims therefrom) under 35 U.S.C. § 103(a) as obvious over Leffew (US

6,409,491), Yoshida (US 6,220,847) or Ready (US 6,474,969), each in view of Dudley (US

4,123,207). The Applicant traverses this rejection, as none of these references discloses the

feature of having a heater proximate or at the downstream zone of the exit orifice of the die.

Claimed embodiments of Applicant's invention involve "a heater proximate said

downstream face and proximate with said at least one passage at said downstream opening"

and/or "a heating means for said downstream zone [the downstream zone terminating said

extrusion die assembly at an exit opening]." The Applicant's specification at paragraph [0032]

defines the heating feature in certain embodiments as being "at or near the exit point of the

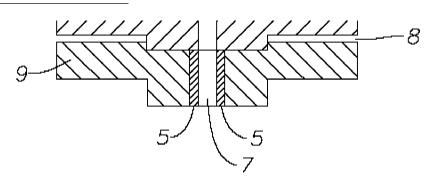
polymer from the die," equating this with the use of the term "proximate." An embodiment of

the claimed features is shown in Figure 2 (reproduced in part below):

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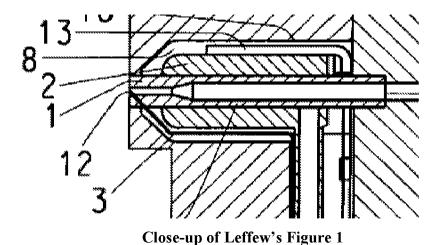
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**Close-up of Applicant's Figure 2** 

wherein the heating element 5 is at the distal portion of the die <u>at the opening 7</u>. Given this interpretation of the claims, consistent with the written description, the Applicant contends that none of the art cited by the Examiner discloses the features of the independent claims 36, 51, 72, 73 and 80.

Leffew discloses a heater 2, as reproduced below from Figure 1 of Leffew. In this close-up of the drawing, it is apparent that the heater 2 is not at the die opening ("outlet 12") as in Applicant's claimed embodiments. In fact, there is a thermocouple 3 located at the outlet that would prevent the placement of the heater 2 at the die opening.

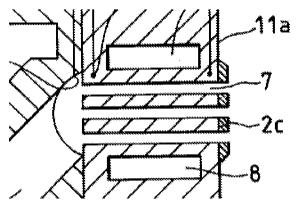


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Further, the "air gap 8" would make the placement of a heater at the die opening impossible, and render the die of *Leffew* unfit for its intended purpose. It should be noted that the Examiner's association of the "outlet 12" with the "polymer passage 15" is erroneous, as these two features are not immediately adjacent features.

Yoshida discloses a die having "nozzles 7" surrounded by "heat transfer channels 8," as reproduced below in a close-up of Figure 2. The Examiner states that the "heaters (8) [are] proximate the down stream face and proximate the passage at the downsteam face." However, Yoshida uses the term "periphery" to describe the position of the heaters 8, not "proximate." The Applicant uses the term "proximate" to mean at the die opening, as defined in the Applicant's specification at paragraph [0032].



Close-up of Yoshida's Figure 2

It is clear from the close-up view of the die in *Yoshida* that the heaters are indeed located around the periphery of the nozzle 7 and not at a terminating portion. At the opening of *Yoshida* is instead the "hardened layer 2c." What *Yoshida* does not disclose is any heating means at this portion of the die as in Applicant's claimed embodiments. *Yoshida* clearly does not disclose Applicant's invention.

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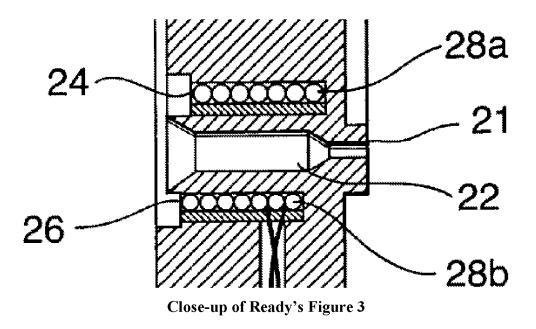
<sup>&</sup>lt;sup>1</sup> As explained in *Leffew* at column 3, lines 34-42, the air gap 8 is used to pass cooling air to cool the passageway.

<sup>&</sup>lt;sup>2</sup> Yoshida at column 3, line 35.

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Ready discloses a die having electrical heating elements 28a and 28b as shown in the close-up reproduction of Figure 3 below. The heating elements surround the orifice 22. On the drawings and description of Ready, it is apparent that the heating elements are not "distal" in the sense claimed in Applicant's embodiments. In fact, the narrowed orifice at the right hand side of the figure is surrounded by a protruding feature (hash-marked area not labeled) that would indicate that the die opening is actually somewhat cooled compared to the middle portion that is heated with the coils.



Ready clearly does not disclose or suggest "a heater proximate said downstream face and proximate with said at least one passage at said downstream opening" and/or "a heating means for said downstream zone [the downstream zone terminating said extrusion die assembly at an exit opening]."

In order for the prior art to "teach" a claimed feature, that feature must be unambiguously disclosed or suggested. The Examiner has not shown how the prior art of record discloses all the features of the claimed embodiments of Applicant's invention(s). Hence, the Applicant requests the withdrawal of the prior art-based rejections.

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Having demonstrated that the cited references fail to disclose or suggest the invention as

claimed, and all other formal issues having now been fully addressed, this application is believed

to be in condition for allowance. If necessary to effect a timely response, this paper should be

considered as a petition for an Extension of Time sufficient to effect a timely response. Please

charge any deficiency in fees or credit any overpayments to Deposit Account No. 05-1712

(Docket #: 2003B103/2).

Respectfully submitted,

Date: August 26, 2008

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